Agenda Item No._____

File Code No. 530.04

CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: February 10, 2009

TO: Mayor and Councilmembers

FROM: Transportation Division, Public Works

SUBJECT: State And De La Vina Intersection Reconfiguration Project

RECOMMENDATION: That Council:

A. Direct Staff to continue with the Transportation and Circulation Committee's (TCC) recommended concept for the State and De La Vina Intersection Reconfiguration Project;
B. Approve the final design elements for the Project as presented to the Architectural Board of Review (ABR) on May 8, 2008; and
C. Authorize an increase in MNS Engineering's contract in the amount of $20,000 to complete the Project design.

EXECUTIVE SUMMARY:

Council's direction is sought on whether to proceed with the Project. A history of the Project is presented below, including the project development background, design history, and alternatives considered. TCC recommendations are also provided.

DISCUSSION:

Background

The Project was first discussed during the 2003-2004 Oak Park Neighborhood Traffic Management Program (NTMP) process as a potential means of addressing neighborhood concerns regarding the intersections of De La Vina Street at both State Street and Samarkand Drive. The participants of this neighborhood outreach process (Participants) identified this general area as one of top ten priorities because of the difficulties in access and egress from Samarkand Drive and the immediately adjacent commercial area, and because of the potential for bicycle or pedestrian conflicts with vehicles on State Street at De La Vina.

The Core Group of the NTMP (Core Group), a group of Oak Park residents who volunteered to work with Staff, reviewed alternatives and recommended that a change

to this intersection be funded as a Capital Improvement Project. The size of the proposed Project placed it outside the scope of funding available for Oak Park NTMP improvements. Staff indicated that alternative funds would be sought to improve this intersection. For these reasons, it was agreed that this Project would not be part of the neighborhood ballot used to determine use of Oak Park NTMP funded improvements. This Project was also identified in Section V of the Upper State Street Study (2007) "to modify the intersection as planned to remove the eastbound free-right turn and provide positive signal control for all crosswalks at the intersection."

In November 2005, Council authorized this Project as one of five intersections identified for funding through Traffic Congestion Relief Program (TCRP) grant funds. This Project was approved by the California Transportation Commission and the Regional Transportation Planning Agency as an appropriate candidate for the use of TCRP grant funds in September 2006. The TCC found a concept design for this Project to be consistent with the Circulation Element on November 8, 2007, and reconfirmed its finding on December 11, 2008.

The Project's components include traffic signal modifications, access ramps, crosswalk striping, and replacement of the right turn lane with landscape.

Issue Identification

At one time, Hollister Road and De La Vina connected as one continuous road at this location. It was not until 1951 that State Street was extended from Constance to Hollister, and Hollister was renamed State Street. The curb edge of the large radius was left in place presumably because it provided for economical construction of the new intersection. At the time of the intersection's construction, the land use adjacent to the turn was automobile oriented. However, today this entrance serves as the gateway to the Upper De La Vina Commercial District where multiple commercial areas serve residents using all modes to access a coffee shop, Mackenzie Park, restaurants, and Trader Joe's.

The current configuration of the intersection is vehicle oriented and places pedestrian and bicycle movements at a secondary level of comfort and safety. Some of the issues identified by the participants at this particular intersection include: inconvenient and uncomfortable pedestrian crossings (190 feet with two refuges across De La Vina, and 125 feet with one refuge across State Street); stopping distance that is less than typical at a conventional intersection; 85th percentile speeds between 31 and 35 miles per hour through the turn; bicycle weaving across the free-right turn lane with atypical yielding in order to continue on State Street; and poor aesthetics. In the last 5 years, 7 collisions have been reported near the Trader Joe's parking lot where maneuverability and visibility are limited. Collision data does not indicate a problem at this location, however, Staff, Engineering Consultants, and Police Department representatives see potential pedestrian and bicycle safety issues at this location, consistent with the concerns raised with Oak Park NTMP processes. Lack of funding has prevented this issue from being

addressed in the past, but with the available grant funds, there is an opportunity to address the potential pedestrian and bicycle safety issues now.

In order to address the identified issues, a plan was developed that would balance the functionality for all users. The elimination of a free-right turn lane is a recommended practice in modern intersection design to improve pedestrian access. With this proposal, all right turning traffic would turn at the signal, consistent with typical signalized intersections in the City.

Project Design History

The merits of the current design have been the subject of considerable community debate.

Design commenced on the Project in spring 2007. The Parks and Recreation Commission reviewed and approved tree removal and replacements necessary for the Project to move forward in February 2008. The Project has been before the ABR twice (November 2007 and May 2008), but has failed to gain support. The ABR and members of the community asked that other alternatives to the removal of the free-right turn lane be considered. While there was significant concern expressed by the Board regarding the proposed Project and the removal of the median and right turn lane, the landscaping, as presented should the island be removed, was deemed satisfactory by the ABR.

Staff reassessed the alternatives brought forward previously to the TCC and ABR, as well as other alternatives not previously considered. In addition to the proposal created and supported by the Core Group to remove the free-right turn, three alternative concepts emerged: a proposal that removes the free right-turn while maintaining an island; a proposal that retains the free-right turn lane while reducing its width; and a proposal that builds on the narrowing of the free-right turn concept by adding on the closure of the northbound right turn lane and/or curb extensions and a median on De La Vina Street. It should be noted that a roundabout option was considered as well, but dismissed because of right-of-way concerns.

The three design concepts were described in detail at the December 11, 2008, TCC meeting. The purpose of the meeting was to allow TCC members to provide feedback on the various concepts and to provide advice to Council as to which option was preferred, based on its consistency with the Circulation Element. The operational elements and merits of each option were described (Attachment 1) as was an evaluation matrix (Attachment 2), used to help identify the policy application for decision-making purposes.

Staff concluded that each of the alternatives described to the TCC could provide some pedestrian and bicycle benefits. However, no proposal that maintains the free-right turn could be considered to provide equality of convenience, comfort, and safety for all

modes because of the disadvantage to pedestrians. Therefore, it was the recommendation of Staff that the proposal to remove the free right turn to create a standard intersection best meets the policies of the Circulation Element.

The design concept ultimately supported by the TCC at its December 11, 2008, meeting was the proposal to remove the free right turn and create an additional landscape area in the altered space. The TCC approved the following motion: "That the TCC reaffirms its support for the original option of November 8, 2007: Removing the free-right turn."

Additionally, the TCC made recommendations about specific design elements emphasizing the possibility to improve pedestrian access at Samarkand and De La Vina by adding a pedestrian island, as well as pre-wiring the traffic signal at State and De La Vina for a right turn green arrow in the event the future traffic volumes require this modification to maintain an acceptable LOS.

Circulation Element Policy Implications

The intent of the Project is to implement many of the Circulation Element Policies:

- Policy 2.1 – Work to achieve equality of convenience and choice among all modes of transportation.
- Policy 4.2 - The City shall work to expand, enhance, and maintain the system of bikeways to serve current community needs and to develop increased ridership for bicycle transportation and recreation.
- Policy 5.1 – The City shall create an integrated pedestrian system within and between City neighborhoods, schools, recreational areas, commercial areas, and places of interest.
- Policy 5.5 – The City shall create and foster a pedestrian friendly environment through physical and cultural improvements and amenities.
- Policy 5.6 - The City shall make street crossing easier and more accessible to pedestrians.

Environmental Analysis

A significant environmental impact would occur if a project would cause the LOS to drop below LOS C or 0.77. The intent of this Project is to maintain a satisfactory LOS for vehicles at the intersection. While the overall LOS for the intersection remains the same, at LOS B, staff recognizes the right turning movement would experience some delay and drop to LOS C. However, the Project as proposed would not reduce the vehicular LOS below LOS C; therefore further environmental analysis is not required.

BUDGET/FINANCIAL INFORMATION:

Budget And Schedule

The Project for De La Vina and State Street is currently funded for design through the TCRP. Construction dollars will be allocated by the State on a first-come, first serve basis once the Project is ready to go out to bid. Due to the delay in Project approval, design services have exceeded those proposed by MNS Engineering. An additional $20,000 is required to prepare the Project for final design, in order to retain sufficient funds in the contract for the design of traffic signals on De La Vina at Canon Perdido and Figueroa Street. The complete cost of the Project, including design, construction, and construction management, is currently estimated at $893,503, with $670,125 in TCRP funds and $223,378 local match. Given the time required to produce final bid documents and the timeline anticipated for State of California allocation of construction funding, it is expected that construction will not occur until 2010.

Alternate Use of Funds

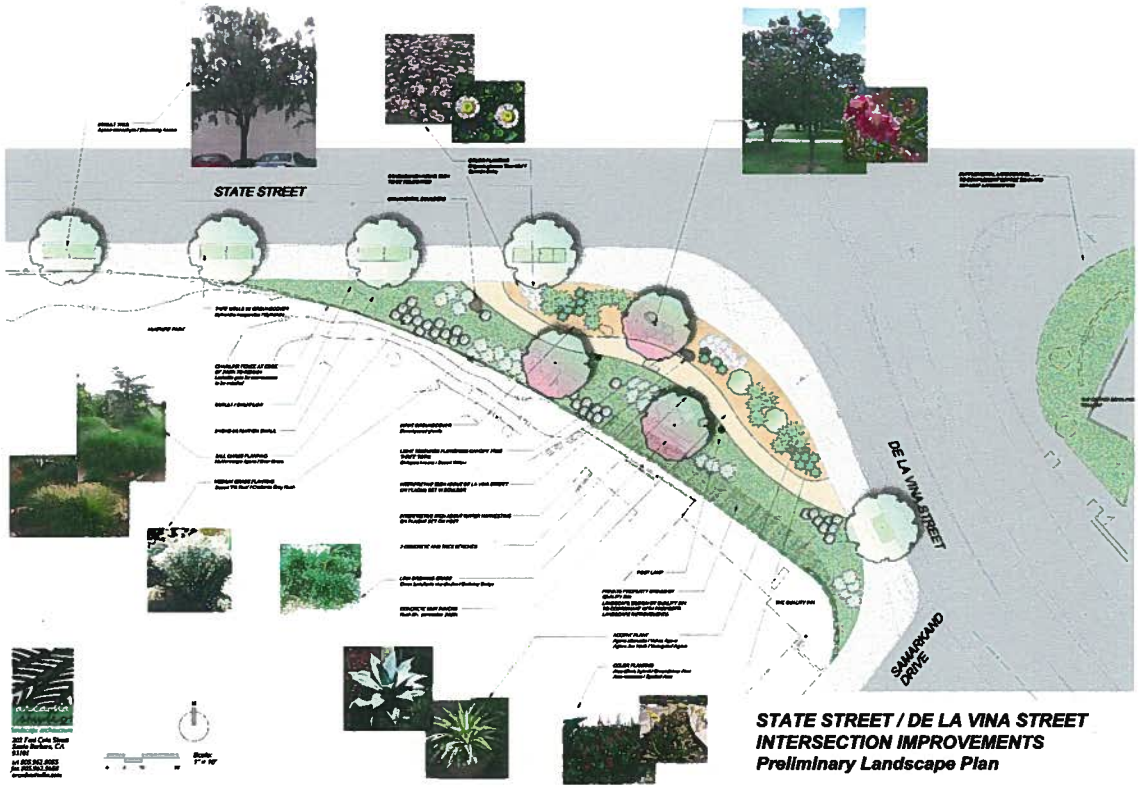
The current grant proposal accepted for TCRP funds included improvements at five intersections. If the Project does not move forward, the TCRP funds could be utilized to finish the design and construction of traffic signals/intersection improvements at De La Vina at Figueroa, and De La Vina at Canon Perdido. Should funds remain, staff recommends pursuing design of improvements at Alamar at State Street.

ATTACHMENT(S):
1. State and De La Vina Intersection Reconfiguration Project Concept Alternatives
2. State and De La Vina Intersection Reconfiguration Project Decision Matrices

PREPARED BY: Browning Allen/DvH/tm

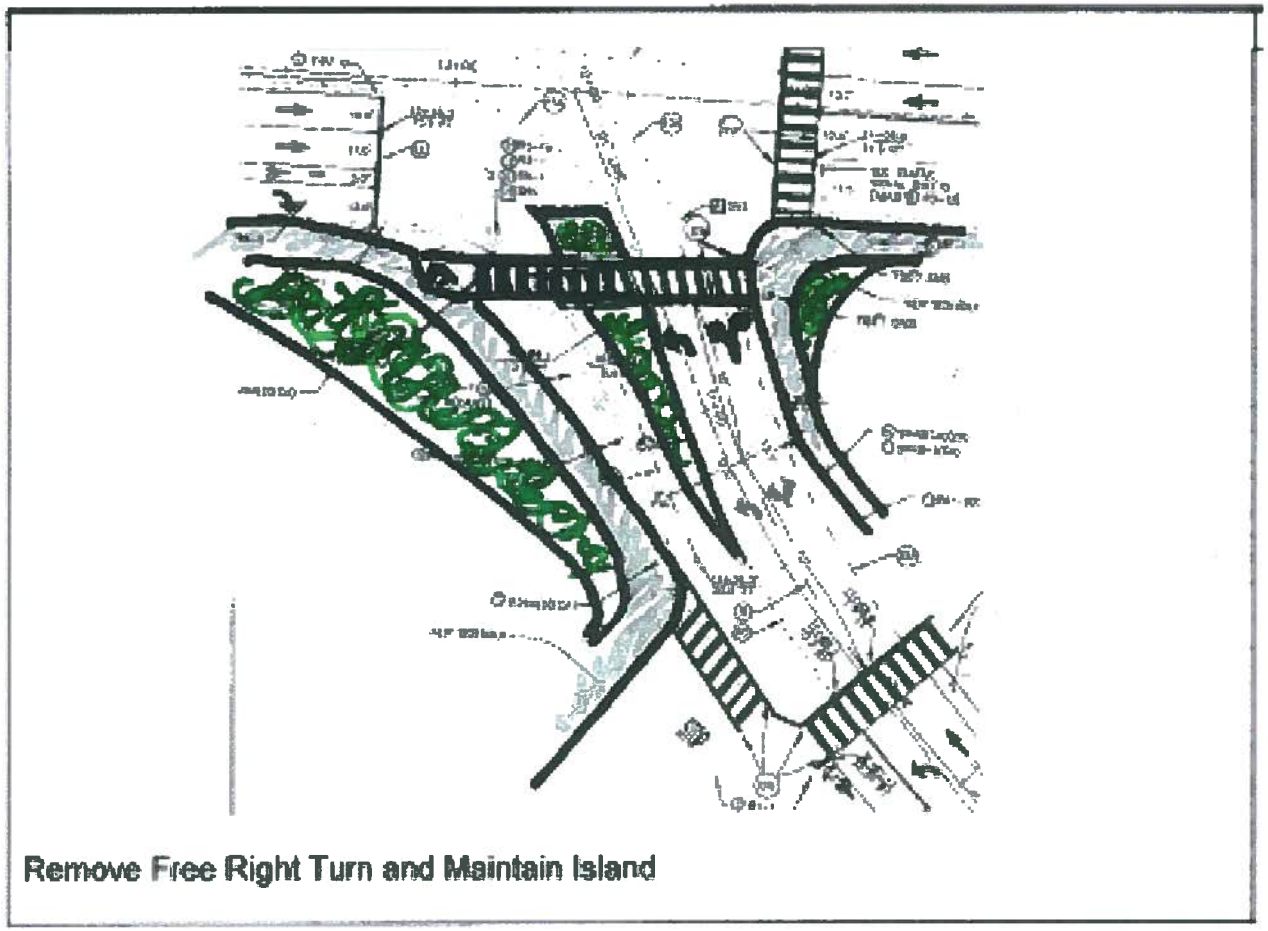
SUBMITTED BY: Christine F. Andersen, Public Works Director

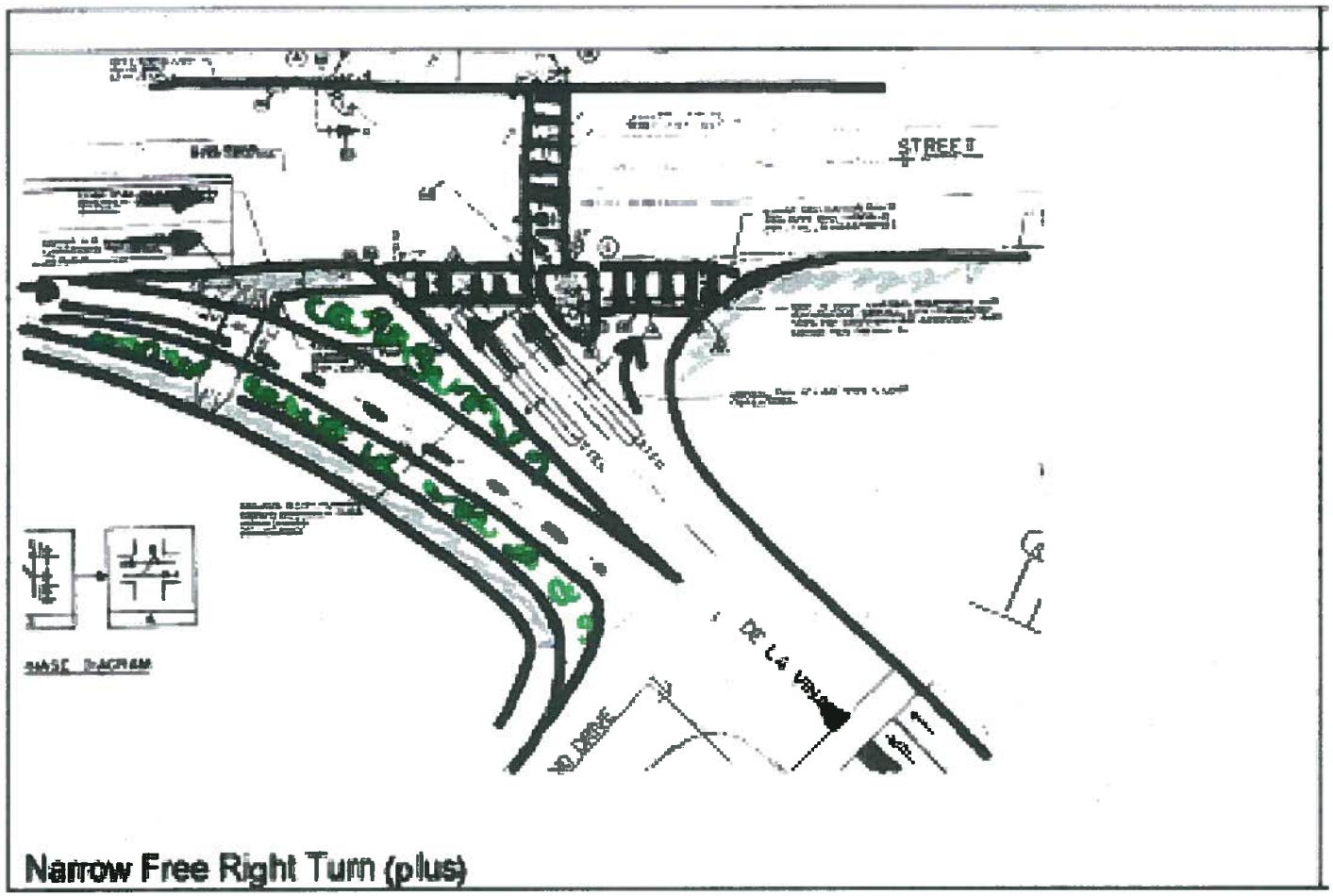
APPROVED BY: City Administrator's Office



Concept 1: Remove Free-Right Turn

PROPOSAL ELEMENTS	PROPOSAL MERITS
• Free right turn lane replaced with park • Exclusive NB De La Vina right turn lane replaced with curb extension • Existing island replaced with SB De La Vina lane • 80' right turn pocket on State • Bike lane to left of right turn pocket on State • 50' pedestrian crossing of De La Vina	• State street crossing will be initiated from the corner instead of on island • Slower speeds to Samarkand crosswalk should increase yield rate • DLV turns from 3 crosswalks into 1 crosswalk, and State turns from 2 crosswalks into 1 crosswalk • Reduces the pedestrian exposure by reducing the crossing distance along State crossing DLV & protected by the pedestrian phase of the signal • Access for downstream driveways should improve because oncoming vehicle speeds are slower • The asphalt is recaptured to landscaping, improving sustainability

	PROPOSAL ELEMENTS	PROPOSAL MERITS
 **Concept 2: Remove Free-Right Turn and Maintain Island**	• Free right turn lane replaced with smaller park • Exclusive NB De La Vina right turn lane replaced with curb extension • Existing island reduced to 40% • 80' right turn pocket on State • Bike lane to left of right turn pocket on State • 90' pedestrian De La Vina crossing with one refuge	• State street crossing will be initiated from the corner instead of on island • Slower speeds to Samarkand crosswalk should increase yield rate • DLV turns from 3 crosswalks into 2 crosswalks, and State turns from 2 crosswalks into 1 crosswalk • Reduces the pedestrian exposure by reducing the crossing distance along state crossing DLV & protected by the pedestrian phase of the signal • Access for downstream driveways should improve because oncoming vehicle speeds are slower • The asphalt is recaptured to landscaping, improving sustainability



Concept 3: Narrow Free-Right Turn (plus additional optional features)

PROPOSAL ELEMENTS	PROPOSAL MERITS
• Free right turn lane is reduced to 12' plus 6' bike lane • Landscaped parkway adjacent to curb • No change in NB De La Vina approach • Curb side bike lane east-bound State Street • Option of closing NB De La Vina right turn lane • Option of adding pedestrian refuge and curb extension on De La Vina at Samarkand • 190' pedestrian De La Vina crossing with two refuges	• Speed reduction in free right turn should increase yield rate at Samarkand crosswalk • State Street through bike lane adjacent to curb • Enhanced pedestrian crossing at Samarkand • Maintains existing island • Provides landscaped parkway adjacent to free right turn • State street crossing could be initiated from the corner instead of on island • Access for downstream driveways should improve because oncoming vehicle speeds are slower • Low cost due to minimal change to existing traffic signal

ATTACHMENT 2

Evaluation Matrix: Operations Considerations

	SB DLV Pedestrian Crossing	Improve Bike Lane EB State	Vehicle LOS	Samarkand Intersection	Cost Relative to Benefit	NB RT DLV Pedestrian Crossing	Samarkand Pedestrian Crossing	DLV NB Pedestrian Crossing	Landscape Potential	Minimized Parking Loss	Functional Green Space	Total
Unweighted Rating												
Remove Free Right Turn	4	3.5	1.5	4	2	4	2	1	3	1.5	4	30.5
Remove FRT Maintain Island	1	3.5	1.5	3	1	2	1	2.5	4	1.5	3	24
Narrow Free Right Turn	2.5	1.5	4	1.5	4	1	3	2.5	1	3.5	1	25.5
Narrow Free Right Turn (plus)	2.5	1.5	3	1.5	3	3	4	4	2	3.5	2	30
Importance Factor	*3*	*2*	*2*	*1*	*3*	*1*	*3*	*1*	*3*	*1*	*2*	
Rating Weighted by Importance												
Remove Free Right Turn	12	7	3	4	6	4	6	1	9	1.5	8	61.5
Remove FRT Maintain Island	3	7	3	3	3	2	3	2.5	12	1.5	6	46
Narrow Free Right Turn	7.5	3	8	1.5	12	1	9	2.5	3	3.5	2	53
Narrow Free Right Turn (plus)	7.5	3	6	1.5	9	3	12	4	6	3.5	4	59.5

Note: Rating definition
4 = most benefit
1 = least benefit

Note: Importance Factor Definition
3 = High Value
2 = Medium Value
1 = Low Value

Evaluation Matrix: Policy Considerations

	Policy 2.1 – Work to achieve equality of convenience and choice among all modes of transportation	Policy 4.2 - Expand, enhance, and maintain the system of bikeways	Policy 5.1 – create an integrated Pedestrianestrian system within and between City neighborhoods, schools, recreational areas, commercial areas, and places of interest.	Policy 5.5 – create and foster a Pedestrianestrian friendly environment through physical and cultural improvements and amenities.	Policy 5.6 - make street crossing easier and more accessible to Pedestrianestrians.	Change in Level of Service for Vehicles	Total
Unweighted Rating							
Remove Free Right Turn	4	2.5	4	4	4	1	19.5
Remove FRT Maintain Island	3	2.5	3	1	3	2	14.5
Reduce Free Right Turn	1.5	2.5	1.5	2	1.5	4	13
Reduce Free Right Turn (plus)	1.5	2.5	1.5	3	1.5	3	13
Importance Factor	*3*	*2*	*3*	*2*	*3*	*2*	
Rating Weighted by Importance							
Remove Free Right Turn	12	5	12	8	12	2	51
Remove FRT Maintain Island	9	5	9	2	9	4	38
Reduce Free Right Turn	4.5	5	4.5	4	4.5	8	30.5
Reduce Free Right Turn (plus)	4.5	5	4.5	6	4.5	6	30.5

Note: Rating Definition
4 = most benefit
1 = least benefit

Note: Importance Factor Definition
3 = High Value
2 = Medium Value
1 = Low Value